

TITLE OF THE INVENTION

METHODS FOR NON-INVASIVE ANALYTE MEASUREMENT FROM THE
CONJUNCTIVA

ABSTRACT OF THE INVENTION

The present invention is related to non-invasive methods and instruments to detect the level of analyte concentrations in the tissue of a subject by measuring electromagnetic radiation signatures from the subject's conjunctiva. The spectra of mid-infrared radiation emitted from a subject's body are altered corresponding to the concentration of various compounds within the radiating tissue. In one aspect of the invention, an instrument floods the conjunctiva of the subject with electromagnetic radiation in the mid-infrared range and measures analyte concentrations based on mid-infrared radiation reflected back to the instrument.